

VISUALIZATION

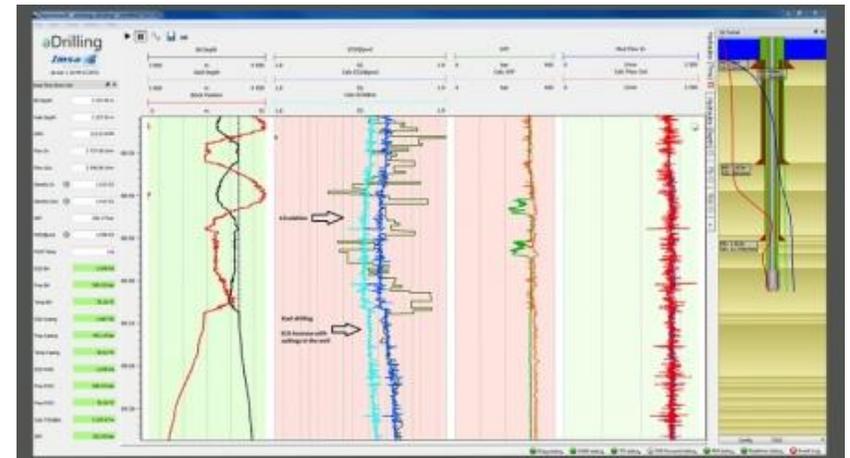
We pull data for analysis from your current WITSML vendor/provider and use your existing user interface for visualization/display. If you don't have a user interface for display then we will use our standard inhouse softwares provided by our partners. Our engineers are trained specifically for our inhouse softwares, although our team of professionals are adaptive to the common monitoring platforms widely used in the industry,

For realtime visualization we are using **wellAhead**, an interactive software combining data and information gathered from various drilling modules. For automated NPT monitoring we integrate **DRILLYTICS** into **wellAhead**. This automates sending relevant advice and best practices directly to the driller; realtime symptomatic drilling algorithms reduce alarms and alerts.

wellAhead™

wellAhead enables decision makers to have better insight into the status of the well thus make better and quicker decisions.

wellAhead uses all available real-time drilling data (surface and downhole) in combination with real-time modeling and operational plans to monitor and provide advisory for more optimal drilling. This information is visualized real-time in a graphical user interface.



wellAhead monitoring ECD increase due to more cuttings in well

Benefits

Real-time mathematical models fed with real-time drilling data will create a true mirror of the well. This will then enable:

- Diagnosis and advisory
- Forward looking
- What-if scenarios
- A virtual wellbore, with advanced visualization of the downhole process

Modules

- Flow & Temperature
- Torque & Drag
- Operational status
- Diagnostics
- Wellbore stability (optional)
- Pore pressure (optional)
- Visualization

Problems addressed

- Hole cleaning
- Lost circulation
- Kick detection
- Connection
- Tripping

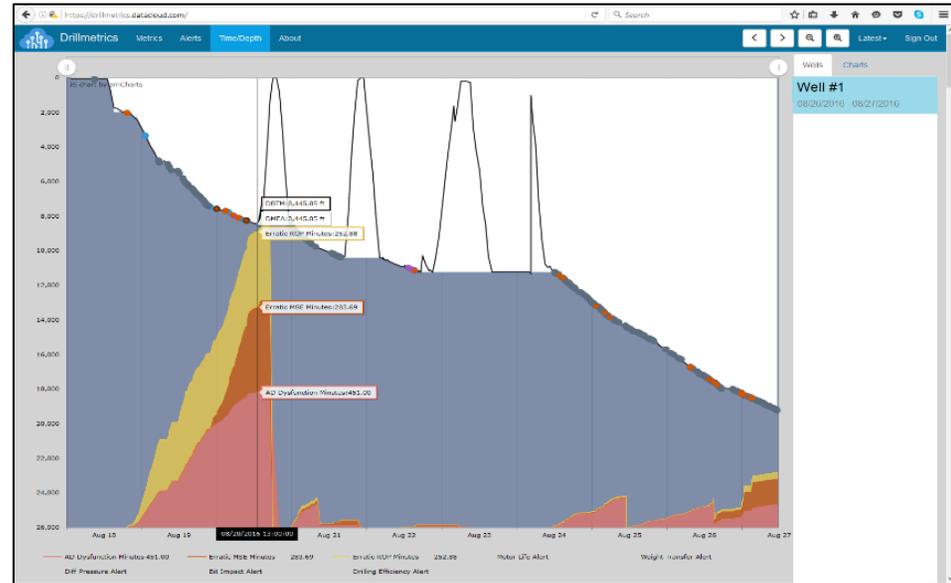
DRILLYTIC / DRILLMETRICS

DRILLYTICS / DRILLMETRICS maximizes realtime drilling performance with automatic, intelligent analytics. It combines practical recognition of symptomatic patterns in your data with situational assessment and prescriptive feedback.

Integrates into any common data viewer and is completely data and tool agnostic for easy workflow integration

Drives drilling efficiency and benchmark trends across rigs, sections and crews as data is analyzed in realtime

Automates sending relevant advice and best practices directly to the driller; realtime symptomatic drilling algorithms reduce alarms and alerts.



Wellsite

Integrated Realtime Visualization:

- Smarter gauges using analytical outputs from Drillytics
- Automatic situational alerting; efficiency measure track and other useful analytical curves
- Automatic feedback including advice, best practices and positive reinforcement

Drilling Management

Realtime KPI Mobile Dashboard:

- Realtime overview of analytics across fleet
- Realtime vs historic well comparison
- Methods for visualizing KPIs for many performance initiatives

Remote Operations

Realtime Advice Delivery:

- Robust alert/alarm rule construction tools
- Reduced number of required alarms
- Deployment across single or multiple wells
- Automatic advice/best practice delivery to Driller